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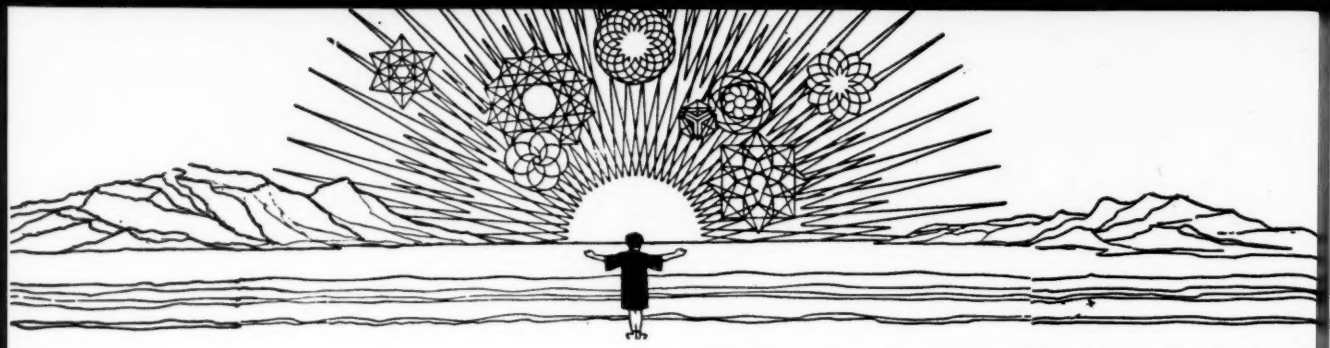

MAIN CURRENTS
IN MODERN THOUGHT

A cooperative journal to promote the free association of those working toward the integration of all knowledge through the study of the whole of things, Nature, Man, and Society, assuming the universe to be one, dependable, intelligible, harmonious.

CONTENTS

The cover reproduces a painting, Bamboo in the Wind, by Wu Chen, through the courtesy of the Museum of Fine Arts, Boston. A fuller description appears on page 16.

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MAIN CURRENTS IN MODERN THOUGHT is published to call attention to significant contributions to learning currently being made in the multiple fields, relating these advances to each other and to classical and contemporary views of Eastern, European and American thinkers. It is designed to save time for the reader by providing a vantage-ground from which the whole world of knowledge may be surveyed and kept in proportion as it moves toward integration. Its editors assume that the principles of art, the universals of philosophy, the laws of Nature and Man as formulated by science, and the truths of comparative religion, can be orchestrated into a harmonic, meaningful, ethical body of teachings which can and should be made the central core of curricula study in the educative process at all levels. Contributors to MAIN CURRENTS enjoy full liberty of opinion and expression in these pages.
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THE MYSTERIOUS ENERGY OF LOVE

Pitirim A. Sorokin

Man's Freedom Lies in his Ability to Cultivate his Greatest Source of Creative and Regenerative Power

I

IN recent decades science has opened several new fields to its exploration and use. The probings into the subatomic world and the harnessing of atomic energy are but two examples of these ventures. Perhaps the latest realm to be explored is the mysterious domain of altruistic love. Though now in its infancy, its scientific study is likely to become a most important area for future research: the topic of unselfish love has already been placed on today's agenda of history and is about to become its main business.

Before the First World War and the later catastrophies of our time science largely shunned this field. The phenomena of altruistic love were thought to belong to religion and ethics rather than to science. They were considered good topics for preaching but not for research and teaching. Moreover, the prewar science was much more interested in the study of criminals than of saints, of the insane than of the genius, of the struggle for existence than of mutual aid and of hate and selfishness than of compassion and love.

The explosion of the gigantic disasters after 1914 and the pending danger of a new suicidal war have now radically changed the situation. These calamities have given impetus to the scientific study of unselfish love. They have also led to basic revisions of many theories until now regarded scientific, and especially those which dealt with the causes and means of prevention of wars, revolutions, and crime.

Among other things these revisions have shown that without reinforcement by the energy of unselfish love, all the fashionable prescriptions for elimination of these ills of humanity cannot achieve their task. This conclusion equally applies to all the prescriptions that try to prevent conflicts by either purely political, educational, sham-religious, economic, or military means. For instance, we may like to think that if tomorrow all the governments in the world were to become democratic, we would finally have a lasting peace and crimeless social order. Yet, recent careful studies of comparative criminality, of 967 wars and 1629 internal disturbances in the history of Greece, Rome, and the Western countries since 600 B.C. up to the present time show that democracies have hardly been less belligerent, turbulent, and crime-infested than autocracies.

The same goes for education in its present form as a panacea against international wars, civil strifes, and crimes. Since the tenth century on up to the present time education has made enormous strides forward. The number of schools of all kinds, the per cent of literacy, and the number of scientific discoveries and inventions have greatly increased. Yet, the number and deadliness of wars, bloody revolutions, and grave crimes have not decreased at all. On the contrary, in this most scientific and most educated twentieth century they have reached unrivaled heights and have made this century the bloodiest in the past twenty-five centuries of Graeco-Roman and Western history.

Similarly, the tremendous progress of knowledge and domestication of all forms of physical energy has not given man any lasting peace. Rather, it has greatly increased his chances of being destroyed in all forms of interhuman conflicts.

Even shallow—purely verbalistic and ritualistic—religion does not help much in this task, if such an "easy" religion is not implemented by deeds of unselfish love. Jesus, St. James, and St. Paul quite correctly stated that "faith without works is dead," and that "in Jesus neither circumcision availeth anything, nor uncircumcision; but faith which worketh by love." As systematic practice of the commandments of love is much more difficult than a mere "verbalistic-ritualistic" profession of faith, the truly religious, who unfailingly practice their moral commandments, have always made up an insignificant minority of members of any religious group. Among millions of Christians there are few who regularly practice such precepts of the Sermon on the Mount as: "love your enemies, do good to them that hate you," "whosoever shall smite thee on thy right cheek,

turn to him the other also," or most of the other precepts of this Sermon. The same is true of the followers of other religions with a multi-million membership. When we investigated 73 converts of a popular evangelist we found out that only one of these "mass-assembly line converts" had tangibly changed his overt behavior in an altruistic direction. This deep chasm between noble preachings and ignoble practices explains the modest results of religions in prevention of strife. As this chasm seems to have deepened during the last few centuries there is a little chance for the verbalistic religions to achieve this task in the future.

Finally, the same is to be said about other "magic" prescriptions for elimination of the deadly forms of social conflicts. Neither an establishment of the Communistic, or Socialistic, or Capitalistic economies can accomplish this task because none of the historical societies with these types of economy have been free from this strife. No more hopeful are the beliefs in establishment of a lasting—international and internal—peace by the means of a "massive retaliation" by nuclear or other "ultimate" instruments of warfare. Practiced for millennia, this policy of "peace through power" or through the Roman *si vis pacem para bellum* (if you want peace, prepare for war) has not given to humanity even modestly long peace periods. Recent studies show that on average the incidence of war occurred in every two to four years in the Graeco-Roman and Euro-American history, while the incidence of an important internal disturbance took place in about every five to seventeen years in these countries. Finally, the same studies disclose the fact that each time a more murderous means of warfare has been invented, the scale, the destructiveness, and the casualty of wars and revolutions have tended to increase, instead of decreasing. These "sinister" facts sufficiently well demonstrate the hopelessness of these policies for realization of a lasting peace.

To sum up: the unforgettable lesson given by the catastrophes of this century convincingly shows that without increased "production, accumulation and circulation" of the energy of unselfish love, none of the other means can prevent the future suicidal wars, nor can it establish a harmonious order in the human universe. The mysterious forces of history seem to have given man an ultimatum: perish by your own hands or rise to a higher moral level through the grace of creative love. This situation explains why a serious study of this energy is being started now, and why it is likely to become a most important field of research in the future.

II

"ALL this may be true," my skeptical friends often say to me, "but where are the proofs that this energy of love can work? And if so, how can we increase its production, accumulation, and circulation in the human world?" My answer to these difficult questions is as follows: Our extant knowledge of this energy is, so far, almost negligible. Our "know-how" of its efficient production and utilization is also very meager. And yet, this little knowledge and poor "know-how" warrant enough the hypothesis that this "grace of love" is one of the three highest energies known to man (along with those of truth and beauty).

This energy or power is different from, and irreducible to, the scaler quantities of physics called "force," "work," "power," and "energy." Its properties are qualitative rather than quantitative. As yet, we do not have any "unit" of this energy (like erg in physics) for its exact measurement. So far, we can only appraise very roughly when its (a) intensity, (b) extensity, (c) purity, (d) duration, and (e) adequacy are "notably greater or lesser." If these (a,b,c,d,e) are called "the dimensions of love," these "dimensions" are again different from the dimensions of "force" or "energy" in physics, expressed in the formulas: MLT^2 and ML^2T^2. We do not know, also, whether the law of conservation of energy and other principles of physics are applicable to the energy of love. The term "energy" is used here in its general meaning, as "ability to produce action or effect."

In human beings this energy operates in producing the diverse and complex inner experiences called empathy, sympathy, kindness, compassion, admiration, benevolence, reverence, affection, friendship, and love. In the world of human relations it appears in all situations where another person is treated as an end-value but not the *means* to any purpose. On a social plane love works in all interactions between two or more persons where one's valuable aims and aspirations are shared and helped (to come about) by other persons. Accordingly, all actions and relationships of this sort can be regarded as "workings" of love-energy in different degrees of purity, intensity, duration, and adequacy.

Potentially the energy of love is a tremendous—creative and recreative—power. When it is better known, reverently treated, and wisely applied, it can substantially help in freeing mankind from its gravest ills: war, crime, insanity, misery and cussedness.

For the last few decades, biology, psychology, sociology, and other branches of science have steadily converged toward this view. Their rapidly increasing body of evidence shows, first, that the energy of love is indispensable for generation, continuity, and growth of living forms, for survival and multiplication of species, and for maintenance of health and integrity especially of human individuals. Thus, contemporary biology instructs us that without a minimum of cooperation and mutual aid between parents and the progeny neither multiplication nor survival of either unicellular or multicellular organisms is possible. This is particularly true in regard to hu-

man beings. The helplessness of the newly-born dooms him to certain death if he is not helped for several years of his childhood. The decisive role of heterosexual love in the procreation and raising of normal human beings needs only to be mentioned to show "the workings" of love-energy in this vital matter.

The phenomena of suicide disclose these "works" in their own way. The main factor of so-called "egoistic" and "anomique" suicide is the utter loneliness of its victim, especially when it is caused by sudden disruption of the victim's intimate social attachments. Those who are not loved by anyone and who do not love anybody are the first candidates for demise. The best prevention of it is, therefore, to break free from imprisonment within one's own shell through loving, and being loved by others.

The curative power of love manifests itself in many other ways. Today's psychosomatic medicine informs us that the combination of too little love with too much hate in a person is largely responsible for many cardiovascular, respiratory, gastrointestinal, endocrinologic, genito-urinary and skin diseases, plus for some forms of epilepsy and headache. A great surgeon, John Hunter, suffering from a heart ailment, well summed up this situation by saying, "My life is at the mercy of any rascal who can make me angry."

A rapid deterioration of the health of babies deprived of warm, motherly love is typically demonstrated by a careful, filmed study of what happened to such babies in a well-managed New York foundling home. After three months of separation from their mothers the foundlings began to lose their appetite, failed to sleep, and became shrunken, whimpering, and trembling. During the additional two months their deterioration increased. Twenty-seven babies died during the first year; seven more died during the second year. Twenty-one survived longer, but were so altered that thereafter they could be classified only as idiots. Except for motherly love, these babies had all the care and attention necessary for their well-being. And yet, lack of genuine love made these conditions insufficient to secure the foundlings' survival and healthy growth.

The grace of love—in both forms of loving and being loved—is necessary not only for survival and physical health of infants, but also for their growth into mentally and morally sound citizens. Now we know well that the bulk of juvenile delinquents and psychoneurotics is recruited mainly from the ranks of persons who in their early life were deprived of a minimum of love in their families and in their "unneighborly neighborhood." On the other hand, the Mennonite, the Hutterite, the Mormon and the Friends' communities in the United States yield either none or the lowest quota of criminals, mentally sick, drug-addicts, sex-perverts, and libertines. The main reason for this is that these brotherly communities not only preach love, but steadily practice it not only in regard to the members of their family, but to all members of their community, and even to all members of the human race.

The curative power of love is also increasingly emphasized by recent psychiatric research. It shows that the main healing agent in the treatment of mental disorders is not so much the specific technique of various schools of psychiatry as much as the establishment of rapport — of mutual sympathy and trust—between the therapist and the patient, and placing the patient in a social climate free from enmity and conflict. This possibly explains the "miracle" of healing of a large number of sick persons by the saintly apostles of unselfish love.

Being able to cure physical, mental, and moral sickness, love-energy also contributes to the prolongation of human life. This fact is typically illustrated by the longevity of some 4500 Christian saints studied. These saints lived in the first to the eighteenth centuries, when the average life-span was much shorter than it is in the United States today. Most of the saints lived in the conditions which, according to present standards of public health, were far from hygienic. Many of the saints were ascetics and deprived their bodies of the satisfaction of vital needs. In spite of these adverse conditions, their average longevity was as high, at least, as that of contemporary Americans. An abundant and pure love of the saints for God and for neighbors appears to be largely responsible for their outstanding longevity.

This conclusion is confirmed by the opposite, life-shortening, effects of hate and enmity also ascertained by many recent studies.

The total body of the existing evidence, illustrated by the preceding samples, hardly leaves any doubt of the highly beneficial biological functions performed by the energy of love in human life. Even in the evolution of species and in the behavior of living forms, including man and his social life, the role of mutual aid, cooperation, and other manifestations of this energy is now recognized by science to be as important, at least, as the role of the struggle for existence, which up to recent decades has been regarded as the main factor of the evolution of life and of the course of human history.

III

BESIDES these biological functions the energy of love serves mankind in many other ways. Thus, it has worked—and can increasingly do so—as the best "extinguisher" of interhuman enmity and strife. For our experimental testing of this old truth, we took five pairs of students with a strong mutual dislike of the partners of each pair. We set a task to change in three months, by the technique of "good deeds," their inimical relationships into amicable ones. We persuaded one partner of each pair to begin to render to the other partner small deeds of friendliness, like an invitation to lunch, to the movies, to

a dance, or an offer to help in home work, and so on. At the beginning these deeds were performed without enthusiasm on the part of the renderer, and a few times were rejected by the other partner. Being however repeated, they began to melt enmity and eventually replaced it with warm friendship in four pairs and by an "indifference" in the fifth pair. Similar experiments performed in the Boston Psychopathic Hospital between mutually hostile nurses and patients gave similar results.

Another experimental testing of the old motto "love begets love and hate begets hate" showed that in two experimental groups (of students and patients of a mental institution) the friendly approaches of the members of each group to one another brought forth friendly responses in 65 to 80 per cent of cases, while aggressive approaches were answered by aggressive responses in about the same per cent.

Our detailed investigation of how and why each of some 500 students studied happened to have a certain individual as his "best friend" and another individual as his "worst enemy" disclosed the fact that in almost all the cases of the best friend as well as of the worst enemy the friendship was started by some friendly action, while the enmity was engendered by an aggressive act, of one or of both of the parties.

Historical demonstration of the power of love in taming war and strife is typically illustrated by the policy of Emperor Asoka (c.264-226 B.C.). Horrified by "the abomination of desolation" wrought by his victorious wars, Asoka, under the influence of Buddhism, in the second part of his life radically replaced his belligerent policy with one of peace, friendship, and amelioration of vital economic, mental, and moral conditions of his own people as well as of those in neighboring states. By this policy of "love begets love" he was able to secure peace for some seventy-two years. Considering that such a long period of peace happened only three times in the whole history of Greece, Rome, and thirteeen European countries, Asoka's achievement strongly suggests that the policy of real friendship can secure a lasting peace more successfully than the policy of hate and aggression, unfortunately still followed by the governments of our time.

Generally, the pacifying power of love appears to be the main agency which terminates the long and mortally dangerous catastrophes in the life of nations. A systematic study of all such catastrophes in the history of ancient Egypt, Babylonia, China, India, Persia, Israel, Greece, Rome, and of the Western countries uniformly shows that all such catastrophes were finally overcome by a notably altruistic ennoblement of the people, culture, and social institutions of these nations. This ennoblement often emerges and spreads in the form of of a new religion of love and compassion (like Buddhism or Jainism or Christianity), or as moral and spiritual enrichment of the old religion and its moral commandments. We must not forget that practically all the great religions emerged in catastrophic circumstances and, at their initial period, were first of all and most of all moral social movements, inspired by sympathy, compassion, and the Gospel of Love. They set out to achieve the moral regeneration of a demoralized society. Only later on did such movements become overgrown by complex theological dogmas and impressive rituals. This is equally true of the emergence and initial period of Confucianism, Taoism, Zoroastrianism, Hinduism, Jainism, Buddhism, the Mosaic and the Prophetic Judaism, Christianity, and other ethico-religious movements.

Love-energy not only increases the longevity of individuals, but also the life-span of societies and organizations. Social organizations built mainly by hate, conquest, and coercion, like the Empires of Alexander the Great, Caesar, Ghengis Khan, Tamerlane, Napoleon or Hitler, have had, as a rule, a very short life—a few years, decades, rarely a few centuries. So it has been with various organizations in which unselfish love plays an unimportant role. Thus the average longevity of small economic establishments like drug, hardware, or grocery stores in this country is only about four years. Big business firms (listed on American and European stock exchanges) survive on average only about twenty-nine years. Even the longevity of most of the states rarely goes beyond one or two centuries. The longest existing organizations are the great ethico-religious bodies like Taoism, Confucianism, Hinduism, Buddhism, Jainism, Christianity, and Mohammedanism. All of these organizations have already lived for more than one thousand years—some for over two thousand, and there are no clear signs of their dissolution in the foreseeable future. The secret of their longevity probably lies in their dedication to the altruistic education of mankind and, generally, to the cultivation of love in the human universe.

Finally, the gigantic power of love is manifested in the undying influence of the greatest apostles of love upon the countless millions of human beings and on the course of human history. If we ask ourselves what kind of individuals have been most influential in human history, the answer is the persons like Lao Tze, Confucius, Buddha, Zoroaster, Mahavira, Moses, Jesus, St. Paul, St. Francis of Assisi, M. Gandhi, and other creators and leaders of altruistic religions and morality. Only, perhaps, the influence of the greatest scientists, inventors, philosophers, and artists—that is, of the creative geniuses in the fields of Truth and Beauty—can somewhat rival the beneficient influence of the great apostles of love. In contrast to the short-lived, and often destructive, influence of autocratic monarchs, military conquerors, revolutionary dictators, and potentates of wealth, the great apostles of love have most tangibly affected the lives, minds, and bodies of untold billions during the millennia of history, and still affect us. They had neither

armed forces, nor wealth, nor any of the worldly means of influencing the course of history and destiny of nations. Though their bodies were not of the strongest, nor their I.Q.s of the highest, according to the standards of current mental tests, by the power of their pure and abundant love they accomplished the transformation of millions of men and women, reshaped cultures and social institutions, and conditioned the course of history.

The preceding sketch of the working of unselfish love shows that it is indeed one of the highest forms of creative power necessary for the survival of living forms, human individuals, and social organizations. The minimum of its mysterious grace is indispensable for physical, moral, and mental growth of human beings and societies. It is the noblest and best antidote against all forms of interhuman struggle and against criminal, morbid, and suicidal tendencies. It is the loftiest educational force and inspirer of creativity in all fields of human endeavor. Finally, it is the heart and soul of freedom and of all religious and moral values.

IV

AS to the source of this love energy and the means for its production, accumulation, and application, we know that in potential form it is given to man as a part of his biological endowment as a "social animal." The magnitude of this potential seems to vary from man to man. The amount of this potential love, transformed into actual or "kinetic" energy, is largely conditioned by the kind of man-made culture in which the individual is found and by the kind of social interaction he has with others. The greater the biological endowment of love in the members of a given society, the more do individuals interact according to the rule, "love begets love," the more their social institutions and culture are permeated by the "climate of love," and the greater the output of love energy by the society as a whole.

This output can be notably increased by recourse to several efficient techniques for the production and accumulation of this energy. Despite our meager understanding of them, some thirty techniques are known to exist. With increased research our understanding of them may deepen and new ones may be invented. The known techniques range widely in complexity from the rudest to the most subtle. As examples of the simpler techniques can be mentioned the use of various chemical, physical, and biotic agents; training in posture and control of the autonomic nervous system; and techniques of conditioned reflexes, habit formation, mechanical drilling, and punishment and reward. More refined methods involve rational persuasion and scientific demonstration, reinforced by mobilization of man's emotional, affective, and volitional forces; use of the heroic examples; direct life experience; and the inspiration of the fine arts. The subtle techniques to increase the altruism of man include stimulation of man's creativity; concentration, meditation, and self-examination; and especially the complex methods of the Yogas, of Zen Buddhism, of the founders of religions of love, and of the great monastic orders.

These lines give an idea about the sources of love-energy and the meager "know-how" of techniques of its production and accumulation. In this article there is no room for a detailed discussion of these problems. It suffices to say that if a small portion of the money and effort now spent for war purposes—or even for more effective use of the sources of physical energy—were spent for research and cultivation of unselfish love, the beneficial results of such an endeavor would be most rewarding. If, in addition, every one of us would decrease in his personal life a portion of hateful emotions and actions of enmity and would increase that of emotions and actions of unselfish love—to all human beings—by this change of our mind and behavior we could improve the moral climate of mankind and could contribute to a lasting peace much more than by all the operations of power politics and armament race. The time has come when the intensive cultivation of the creative role has become everybody's business.

Pitirim A. Sorokin was born in the North of Russia, and studied at the University of St. Petersburg, where he received the Magister's degree in criminal law. He was a member of the Constituent Assembly under the Kerensky regime, and consequently suffered imprisonment by the Communists. Freed, he resumed his studies at the University of St. Petersburg, receiving the degree of Doctor of Sociology in 1922, and later becoming the Chairman of its Department of Sociology. After final banishment by the Soviet Government, Dr. Sorokin came to the United States and joined the faculty of the University of Minnesota. In 1930 he was invited to become Chairman of the Sociology Department at Harvard University, where he has worked ever since. In 1948, under an endowment from the Lilly Foundation, he established the Harvard Research Center in Creative Altruism, which in 1955 was incorporated as the Research Society in Creative Altruism. His list of published works includes some thirty-odd volumes which have been translated into many languages. Among the most recent are *The Ways and Power of Love: Types, Factors and Techniques of Moral Transformation* (1954), *Fads and Foibles in Modern Sociology and Related Sciences* (1956), *The American Sex Revolution* (1957) and a one-volume abridged edition of his classic *So-cial and Cultural Dynamics* (1957).

ZEN AND THE INTEGRATION OF KNOWLEDGE

Clyde E. Curran

The Ultimate Need to Relate Logic to Experience, Knowledge to Understanding

CONSIDERED carefully, current attempts to build a coordinated system of principles through which various branches of knowledge may be drawn closer together are not encouraging. The rise of field theories in biology, physics, and psychology appeared likely to establish the basis for a higher degree of integration. Yet researchers have invariably bowed to the kind of specialization that has caused rifts to appear between and within the physical, biological and social sciences. In the humanities too the demands of research are still causing scholars to sharpen their focus until they see only a small segment of the "larger problem."

The usual ways of attempting to integrate knowledge, either by establishing a new rationale or by synthesizing existing conceptual schemes, are simply not working out well. Perhaps what is needed is a new approach. Among the reasons for comparing Western and Asian philosophies is that such study can provide a basis for acquiring a fresh grip on perennial problems. What does a look at the problem of the integration of knowledge from the perspective of Zen reveal?

Students of Zen would not think it startling that the effort to establish a higher order of unity among academic disciplines has produced little but frustration. From the Zen viewpoint, the recently formulated solutions to this problem are self-defeating, because none of them have penetrated to the reason why the problem arose in the first place. The failure of the Western mind to grasp the basis for its defeat is one with its inability to grasp the distinction between a concrete experience and the abstract conceptualized version of this experience. Any conceptualized expression can include but a small segment of the experience. In addition, any verbalized form is ultimately doomed to instability, since its meaning relates to a systematic pattern of thought. A pattern of thought, even when tightly ordered, as in science and philosophy, is not universal; another opposing system will always arise to challenge and contradict it. All systems have in their very formulation a built-in duality between the concrete and the abstract, which investigations in anthropology tell us are relativistic. Therefore it is foolish to think that the very condition which gave rise to the problem of disunity in the first place can be called upon to effect a solution.

One might therefore ask: Toward what are these various systems progressing? Or what is the justification for saying that one system corrects another? Certainly not consistency, for all carefully constructed systems are thus supported. If one system is said to be truer than another, meaning that it squares with reality more exactly, the impossible task of designating "reality" comes to the fore. The problem of disunity in academic studies, which in its larger dimensions means conflict between organized systems of knowledge, would not be with us today if a universal conception of reality could be developed. So far there are no such universally acknowledged first principles. For example, Ortaga (*The Modern Theme*) argues for the development of a metahistory which would bear the same relationship to unique events as physiology does to clinical practice. Yet existing attempts to establish a metahistory (Marx, Hegel, Niebuhr, Toynbee) illustrate how such plans fall short of universality. Even schemes which espouse absolutes, in which a source of unity beyond the contradictions in sense experience and verbalizations is sought, must be communicated by finite, mutable means. Thus in their very conception and statement they fall into the contradictions they were designed to eliminate.

THE preceding observation reflects an attitude close to Zen, which considers hopeless a search for unity through attempts to synthesize conflicting bodies of knowledge. But it would be a mistake to think of this position as anti-intellectual. In *Existentialism, Pragmatism, and Zen,* D. T. Suzuki emphasizes this point: With reference to sense experience, the act of identifying a tree as tree, or even, at a more primitive level, having an experience of a tree, is not possible without the concept "tree." Human beings must express themselves, and therefore they must analyze, differentiate, and build systems of ideas. An experience to be called an experience must be named. Even Tāthātā (a Zen term for aesthetic appreciа-

tion—identity with reality) does not and cannot remain undifferentiated. It must find expression; it must thus be conceptualized.

How can Zen recognize man's drive to construct ideas into patterns, and at the same time deny that these very patterns can provide unity? Tāthātā is whole (undifferentiated); as soon as it becomes conceptualized (differentiated) it is no longer Tāthātā. Concepts belong to the world of time and space—to relativity, morality, conflict, and contradiction. Without the challenge of idea against idea, reflection (vital thinking) would evaporate. Because the very roots of knowledge, upon which thought depends, veer out in many opposing directions, little wonder that the desire for unity, when intellectually channeled, always meets an impasse. Perhaps this is fortunate, for if this craving could be satisfied completely, the life of the mind, which in many ways characterizes man as man, would vanish.

What good is the intellectual life if it cannot satisfy man's most basic desire? Such a question, rather than launching an inquiry, expresses hopelessness. The individual who questions the fruitfulness of knowledge may cry out, "Why do I set a task for myself which I know will defeat me?" But the inevitable answer comes: "Because you are a human being and human beings must do this." The individual who reaches this understanding has acknowledged two principles Alan Watts discusses in his monograph, *The Way of Liberation in Zen.*

First, if people did not struggle to help themselves, even though the outcome may appear futile, they would not know how helpless they are. The strengths, as well as the limitations, of the human mind would remain hidden. Second, when the depths of human helplessness are realized, we need no longer struggle, for then we have given ourselves up—surrendered our egos. While such helplessness is born in anguish, it terminates in peace, liberating the individual.

From this background, the paradoxical nature of the problem of disunity in knowledge becomes apparent. Knowledge (in the formal sense, meaning various systems of principles and related theories), depends upon disunity as a generative force. If Zen is correct, the process of thought as well as its product establishes and dwells in a world of disunity. Attempts to instate harmony among various conflicting branches of knowledge, therefore, are as futile as a woodsman's effort to build a whole log by chopping one up. Even if the pieces are picked up and glued together, this illusion of unity does not satisfy the craving for oneness. Out of the human situation, vast and varied systems of knowledge have been created, constituting man's challenge to hopelessness—his defiant gesture against defeat and conflict. These very systems, however, add to man's plight, for instead of promoting harmony, they fall on one or another side of a conflict between mind and mind, or idea and idea, or will and will.

Thus circularity progresses in the following manner: conceptualization (a human necessity) gives rise to disunity; disunity in turn generates the demand for thought; and thought contributes to disunity. It may be asked: "Is this not the life of the mind? Do not intellection and the products of thought, knowledge, feed upon such circularity?" Of course they do. After thought has moved through many cycles, disunity remains, reminding man of his impotency. The way to liberation from this circularity was suggested by Alan Watts. The individual who realizes that "human beings must do this" has learned that his will to live (his craving for unity) urges him to do the impossible. Because he feels the impotency of the ego, he experiences the Buddhist doctrine of the void, which proclaims that the relativistic world of time and change is empty or vain. With this insight comes the realization that there is a vast life process going on all about us. Once an individual is released from his personal striving (his ego involvement), this panorama of sights and sounds, of everyday happenings—which of course includes all human activities—takes on a freshness and spontaneity. The person so released can step into the mainstream of life, for he is free from the barrier of self which heretofore stood in his way.

Regardless of the imagination and rigor brought to the task of harmonization, knowledge will always be in a state of conflict and contradiction. However, this will not prevent scholars from exerting themselves to the limit to synthesize knowledge. For like other human beings, they are doomed or blessed, depending on the point of view, to attempt the impossible. Only when they understand that conflict cannot be resolved by objective manipulation, since the *problem* is personal (resulting from a split within the ego, or between the ego and the objective world) is there a possibility of liberation.

WHAT, then, is the rule which will support scholars as they try to overcome conflict? Traditionally they have rallied around a "search for truth." Bent on this pursuit, they have come to learn that detachment is an empty convention. The search for truth is a travail—a travail of the intellect, of course, but still more a struggle of the spirit, whose outcome inevitably leads the scholar to a realization of the hopelessness of ever grasping "truth." Perhaps the greatest tragedy that can befall a person dedicated to a life of scholarship is a refinement of the intellect without an accompanying growth of spirit. Even though such an individual may make recognized contributions to knowledge, he has sharpened his wits at the expense of wisdom. And there is always danger that an individual who becomes a professional in "the search for truth" may think he has found what he is looking for and so close the door to enlightenment.

Santayana, in his introduction to *Three Philosophical Poets,* makes a suggestion that may, with a

slight modification, be used as a guide for scholars. He contends that the work of true philosophy will terminate in a view of the world that is at once beautiful and tragic. This insight, however, this "contemplation of all things in their order and worth," when rendered in philosophic statement, almost always fades, because the very weight of thought drives away the momentary vision. Santayana attributes such loss of vision not to the capricious nature of poetic insight but to the human failure to cultivate imagination and memory "and above all to a lack of discipline." With proper attention (discipline) the depth and clarity that exist in a moment can be expanded into a world-outlook. The poets Santayana selects to give support to this point of view, Lucretius, Dante, and Goethe, although so diverse, stand together as reminders that the insight of the moment can be expanded until the "whole world of man is gathered together." They document the thesis that: "It is the acme of life to understand life." The ideas of these poets highlight our cultural mainstreams of thought, throwing into sharp contrast such opposing concepts as the natural versus the supernatural or the classical versus the romantic. The deep recesses of their insight, however, exemplify a harmony of spirit which sounds a single tone, for they did indeed draw from a common spring—an understanding of life.

THE foregoing coincides with Zen if the accent falls upon the poetic insight, the understanding. The Zen conception of enlightenment, "understanding life," is not self-evident. Here is required that slight modification spoken of previously. It is necessary to see that a person may know much but understand little, a distinction Aldous Huxley makes in *Tomorrow and Tomorrow and Tomorrow*. There are many varieties of knowledge: for example, propositions established by scientific experimentation and the theoretic systems which support these investigations. When understanding is conceived as an intuitive perception—an unmediated, unreflective flash of insight—it is apparent that understanding does not automatically convert into knowledge. Understanding may be of such breadth and intensity that it captures the very spirit of a thing or person and still gives little knowledge about that thing or person. A loving parent who immediately senses when his child is ill may yet not know what to do for him.

While we readily see that understanding does not necessarily yield knowledge, if we reverse our perspective, as Huxley does, the outcome is not so clear. We are inclined to think that knowledge will surely lead to understanding. However, although knowledge at some stage must have had a relationship to concrete experience, in its conceptualized form it can be passed from one person to another without recreating the original primary experience. This, of course, is one of its beauties, but it is not without hazard. Individuals can have extensive knowledge without accompanying understanding or insight. (The assumption is that in some way or other experience leads to understanding.) Herein lies the paradox at the center of knowing.

Returning to Santayana's assertion, "It is the acme of life to understand life," if understanding means "knowing" in the sense that "knowing" was defined above, this sentence would have to be changed to read, "It is the acme of life to understand (know) that life cannot be understood (known)."

The scholar who thinks he has found "truth" knows much but understands little. His heavy weight of learning possesses him. A Zen master would say this scholar has taken the transient, contradictory world of letters at their face value, without probing the non-verbal depths. Thus he is plunged into an interminable frustration, from which he cannot escape because he does not realize his situation. D. T. Suzuki *(Mysticism: Christian and Buddhist)* directs attention to this point when he denies that the best philosophies come from the minds "most richly endowed with intellectual acumen and dialectical subtleties." He does not refuse importance to the intellect, but emphasizes that it must be illumined by imagination and insight.

The "seeing," the "understanding," so important to Santayana and Zen, is an elusive thing. While knowledge lends itself to precise statement, in its stated form it does not and cannot convey the understanding out of which it is first born. (It is here assumed that knowledge at its initial discovery is preceded by intuition. This does not mean that all intuitions will convert into knowledge. Nor does it mean that intuition unaided by analysis will give knowledge.)

Let us proceed with the "slight modification" of Santayana's thesis. If what Santayana and Zen say about understanding is not utter nonsense, intuitive *seeing* into things not only provides a measure for appraising philosophic vision but also indicates the source from which scholars must draw their rule when they search for a "principle" of unity.

SANTAYANA recommends the study of literature because of what the study can help the student become, since it provides food for the mind and spirit. A Zen master would not disagree, but he would warn against becoming dependent on written statements which can block direct access to experience. Language can cast a spell which gives the illusion of capturing experience, even though the deepest experiences of man elude the confines of statement. Santayana and Zen both talk about intuition, and consequently stand in this danger. The Zen teacher, however, is not in the least concerned whether or not his statements are contradictory. Here Zen and Santayana part company. Santayana's prose demonstrates the high regard he has for clear, consistent exposition, and, for him, philosophical poetry is an

end in itself. To Zen, poetry can lead to enlightenment only because the reader becomes lost in the experience. The poem is not the generative source of the enlightened experience, it is the catalyst.

Symbols are used in Zen not as containers of truth but as road maps, as pointers to experience. Written statements can express the significant reflections of a sensitive imagination, but this should not lead us into thinking that they can contain (possess) an understanding of life. At best, language can give only a presentiment of the author's understanding. Aldous Huxley put his finger on the heart of Zen when he called it "spiritual pragmatism." Zen settles for nothing short of the "understanding of life." Even the most respected expressions, such as those of the three philosophical poets, Lucretius, Dante, and Goethe, must stand the test of whether or not they have pointed the way to enlightenment.

When Santayana praises these poets for their insight, he strikes a Zen theme. Although each of them reflects the peculiarities of his age and culture, they are remembered primarily for their universality. Taken together, the concepts these poets develop do indeed trace the outlines of western thought. Analysis of their ideas forces the conclusion that while each transcends the limits of his own age, he does not overcome the barriers imposed by the particular system of philosophy to which he is committed. Hence, if read only for the ideas they contain, significant as these are, the reader will miss some dimension, perhaps the most important. Certainly Santayana finds in these men a quality not restricted to their ideas. When he singles out that which is truly universal—their intuitive understanding of life—he comes into contact with the "principle" with which Zen scholars become familiar if they attain unity. He leaves Zen, however, when he looks to the poems themselves as the spiritual substance needed to bring insight to fruition.

ZEN, with its pragmatic bent, pushes directly to the enlightened experience—the undefinable "reality." Although nonverbal techniques are given a predominant place, thousands of words have been written about Zen and the spirit of Zen. In general, statements formulated from the center of the enlightened experience, designed as exercises for teaching Zen, make up one variety. Although there are two classes of such lessons—the *mondo* (dialogues between masters and students) and the *Koan* (puzzles which have no rational solutions)—a typical example of the mondo will serve our purposes here:

Q. I have left my home to become a monk, and my aspiration is to attain Buddhahood. How should I use my mind?

A. Buddhahood is attained when there is no mind which is to be used for the task.

Q. When there is no mind to be used for the task, who can ever attain Buddhahood?

A. By no mind the task is accomplished by itself. Buddha, too, has no mind.

Q. The Buddha has wonderful ways and knows how to deliver all beings. If he has no mind, who would ever deliver all beings?

A. To have no mind means to deliver all beings. If he sees any being who is to be delivered, he has no mind (yu-hsin) and is surely subject to birth and death.

Insofar as the term "metaphysics" is appropriate in Zen, the extensive dialogues can be said to contain the metaphysical component, when it is understood that such written wisdom does not explain reality. The importance of metaphysics, so conceived, lies in the ways in which the statement serves the student in his attainment of enlightenment (Buddhahood).

In addition to the commentaries contained in the dialogues, there is another class of statements which depicts the "feelings" experienced by an enlightened individual. This is the subjective aspect of Zen writing. The term "feelings" does not here mean an overflow of emotions. Paul Tillich's *(The Courage To Be)* term "spiritual"—a creative act, a spontaneous identification between an individual and his surroundings—gives the correct sense. Phrases that are inspired by the spontaneous identification with life, or its "spiritual" quality, could be said to highlight the "feelings" of the enlightened person. The following two poems reflect the existential scope of enlightenment.

How wondrous, how miraculous, this—
I draw water and I carry fuel!

Hundreds of spring flowers; the autumn moon;
A fresh summer breeze; winter snow;
Free your mind from idle thoughts,
And for you any season is a good season.

While the term "subjective" is useful, there is a danger that it may be interpreted in accordance with a theory that attributes value to the inner workings of man. These typical Zen poems should make clear the inadequacy of such an interpretation. Rather than containing emotional overtones, they are stripped of sentimentality. From the Zen point of view, it would be adding red to the rose to do more than draw attention to the miracle inherent in carrying fuel or in looking at "hundreds of spring flowers." The poetic quality in Zen stems from a keen sense of awareness — a spontaneous serenity which pervades the experience of the moment, whatever it may be. An enlightened person does not ask about his feelings, but surrenders himself.

A parallel can be found between Zen and any poetic vision of depth. When Santayana attributes a universal quality to Lucretius, Dante, and Goethe that

binds them together in spirit, he singles out the spontaneous reaction to life which Tillich calls "spiritual" and Zen refers to as Tāthātā (poetic identification). How is it that men who understand life, such as these three enlightened philosophical poets, can communicate this wisdom indirectly, but cannot make it available through their ideas? I believe an explanation of this question (granted its truth) can be found in the difference between the Zen and the western conception of metaphysics.

From the western point of view there exists a *reality,* either irrational or rational or both, either natural or supernatural, either static or dynamic or both, either in man or outside of man or both, which philosophers can make use of in explaining life. Metaphysics in the west deals logically and objectively with principles of reality. (Even when reality is considered as subjective its study is objective.) In the distinction between knowledge and understanding, metaphysics belongs in the category of knowledge which can be transmitted from one person to another through verbal symbols.

Zen, like other Buddhist philosophies, rests upon the enlightenment experience which the Buddha had about twenty-five centuries ago. While this experience, because it embodied an unfolding of inner perception, would be called "subjective" from the point of view of the West, statements made about the experience are objective. The term "metaphysical" is applied to reflections upon the "enlightenment experience" (in Zen, the mondo). These statements, which refer to what a westerner would call psychological phenomena, do not explain the experience, nor are they explanations of a "reality" which the westerner might suppose to have caused the experience. Furthermore, the "meaning" (an inappropriate word) of the enlightenment experience cannot be conveyed, but must be come to by the individual. Thus the metaphysics of Zen has no value in itself, not being an explanation of reality or a body of knowledge, but must be considered as instrumental. If it puts a person in contact with the wordless, meaningless, non-explainable "reality," it has accomplished its mission. While the subjective-objective dichotomy seems to help us to make a distinction between western and Zen metaphysics, it is inadequate with reference to Zen, for the heightened sense of awareness—the unity of the individual and his surroundings—is neither objective nor subjective, but just is.

Because Zen is not considered a conveyor of knowledge, the guiding rule of western logic, consistency, has no place in it. And because Zen rests upon the enlightenment experience it is possible to conceive of a philosopher so creatively engaged in his work that a poetic overtone creeps into his writing, which, while contradicting his commitment to objective analysis, demonstrates that he understands life. Oddly enough, such understanding may not appear in the concepts he develops, for it exists in that unified experience which words cannot capture. The color and tone which obliquely demonstrate that our three philosophical poets were familiar with the spontaneous aspects of creativity do not appear in the concepts they formulate.

A paradox with an even more curious twist presents itself when the Zen point of view is pushed further. A metaphysical statement which is inept with respect to the western philosophic tradition, being shallowly and inconsistently conceived, may serve to take some particular person to the wordless realm of enlightenment. Under its stimulation, some person may be prompted to let go of the illusions that crowd around him and suddenly see deep into the nature of things.

THE foregoing has embodied the "pragmatic" side of Zen. This however, should not be confused with pragmatism, in which purpose is central. Pragmatism, particularly as developed by Dewey, is a method for exercising increasing control over events so that they will more nearly accord with enlightened desires. Desires are seen as becoming enlightened when they reflect a community (a group bound together by common purposes) which in turn is becoming increasingly reasonable. Reasonableness (dynamic, progressive harmony) results from an application of the method (experimentalism) whereby ideals are brought to bear upon events, thus causing them to come into actuality in experience..

More is not needed to show where pragmatism and Zen come together and part company. Dewey's experimentalism and Zen "pragmatic spirituality" coincide in their insistence that the desired actuality is realized by way of experience. There is in Dewey an overwhelming conviction that men can and should improve their lot by cultivating abilities to think through their problems to just conclusions, and in so doing to establish ethical, aesthetic, and religious dispositions. While a Zen student would be sympathetic to this moral tone, he would be skeptical about pragmatic logic and about teleology (faith in reflection as an instrument for achieving social and individual reconstruction so that ever-growing purposes bear fruit in experience). His skepticism would thus include all western philosophy, insofar as it rests its case on reason and purpose. For the enlightenment experience, being outside meaning as herein defined, is also beyond both purpose and method. A Zen scholar would point out that Dewey's conception of logic and purpose is purely relative and reflects a subtle egotism, in holding that reason alone can serve to take man to his intended destiny.

Now that doubt has been cast upon method, it is pertinent to ask, what then is the method of Zen? It is most frequently referred to as "the method of no method." Since this contradictory phrase is often confusing, one or two illustrations may shed some light.

If an athlete, such as a tennis player, is to develop a good game, he knows he must study the fundamentals. But, he must also (and this is crucial) acquire a feel for the game, often described as "rhythm" or "follow through," or sometimes as "balance" or "flexibility." He must learn to make use of his own body in a natural (uncontrived), spontaneous, relaxed manner, such as one experiences in opening and closing the hand. The hand opens and closes naturally, without the assistance of method. Similarly, although there is a great deal of folklore associated with the teaching of rhythm in athletics, a master player will admit that spontaneous movement is non-methodological. Such a quality as rhythm begins when the player is able to "relax," or give up trying. It is true that both before and after the game, especially under the influence of a watching crowd, the competitive element is emphasized. Yet, at the moment of play, the individual gives himself up to the unconscious movements of his body, allowing it to react spontaneously to its inherent rhythm. Such a game occurs without deliberate control; the player has come upon the "method of no method." A fine account of the attainment of effortless effort is given by Herrigel in *Zen in the Art of Archery.*

Another example can be drawn from music. In building technique, a musician must learn the "feel" of the instrument. When he has achieved a degree of competence, his muscles respond automatically, giving him the feeling that the music is playing him. His proficiency is expressed in effortless execution. For example, in the study of brasswinds, as long as a trumpet player strains for high notes, they will sound thin. But if he reverses his attention and gives up trying, as if by their own volition full-bodied, high notes will flow from his horn.

Nor is the "method of no method" restricted to technique. Leopold Auer would tell his pupils that the secret of violinistic interpretation depends, among other things, upon the singing quality that sounds through every note. One of Auer's pupils, who had mastered this singing tone, drew large audiences of students of interpretation. After brilliantly rendering a movement from a concerto, he would say: "So." Any other comment would have been irrelevant. He had demonstrated the "method of no method," whose essence is effortless effort.

The musician or athlete who thus allows his performance to come under the sway of his "natural" powers, no longer strives for perfection, for both purpose and method are momentarily suspended. Observers are struck by the lack of strain, the spontaneity, the freedom. The predominant quality of such an effortless performance is its "creativity." If the "creativity" which the musician or athlete experiences momentarily comes to pervade an individual's entire life, this person may be spoken of by Zen as a "Buddha." He lives a nondetermined existence. This is said to result when an individual sees through (understands) the workings of his egocentricity. Such a person does not grasp life; instead, he allows life to live him.

These illustrations of the method of Zen fall upon the non-rational side.

What part does the intellect play in the "method of no method?"

First, much of Zen literature centers upon its epistemology, that is, seeing the world from the vantage point of a mind free from egocentric desires. To Zen, the problem of the subject-object relationship, central to modern western epistemology, appears to leave the matter of unity untouched. To get at unity it is necessary to understand the forces that divide human beings, and these forces do not seem to be understandable through solution of the subject-object split. This division is symptomatic of something more basic: the compartmentalization of the ego itself.

Scholars who start from the assumption that object and subject are two orders of "reality" leave the problem of disunity untouched. Unity cannot result from the application of a mechanism—the analytical mind—whose chief distinction is its ability to differentiate. Unless the function of differentiation rests upon a unified base, analysis undertaken to instate unity will be continuously frustrated. It is not the assumption but the experience of unity that brings integration. Such an experience rests upon another order of knowing, essentially aesthetic, intuitive, or spiritual in quality.

Part of the method of Zen consists in asking questions the intellect cannot answer. The following Koan is an example: "If a goose is in a bottle, how is it possible to get it out without killing it or breaking the bottle?" The questioner here, like the trumpet player who strains for high notes, must learn to let go of his ordinary patterns of thought. When he no longer desires to fit life into a mold, when he has acquired the "method of no method," his thoughts become spontaneous (unified).

RETURNING to the problem of unity in knowledge, we have approached it by way of modifications of Santayana's thesis: "It is the acme of life to understand life." First it was pointed out that knowledge and understanding do not automatically complement one another. Second, a caution was directed against the assumption that an analysis of the writings of those who understand life will inevitably nourish the spirit. Now it is time to examine and compare Santayana's conception of discipline with that of Zen.

The frequent failure to sustain poetic insight until it permeates the whole of a philosopher's thought, giving it that finesse of balance Santayana calls "reason," he attributes above all to a lack of discipline.

Santayana was not among those who believed that all philosophic reflections were more or less accurate ways of getting at the same reality. The minds of men interpret the raw stuff of nature, and are bound to express personal idiosyncrasies. But insofar as any system of thought merits the name of philosophy, it must embody that primary requisite of a work of art: form. A "true" philosophy for Santayana is so well-formed that it is a thing of beauty in itself. Needless to say, those philosophers who measure up to this criterion must have exercised their intellects and intuitions to the fullest. In short, their art required a most strenuous discipline.

There is in Santayana an austerity, an integrity, that brings him close to the spirit of Zen. Zen too espouses a rigorous discipline. Moreover, neither for Santayana nor for Zen is discipline an end in itself; it must yield an "understanding of life." Yet they differ regarding the nature of discipline. For Santayana, interest centers upon the philosophic statement, and ignores the personal life of the philosopher. If a man has, in his work, reached his peak of creativity, he has transcended ordinary ethics and attained heights of aesthetic and, I think we must add, spiritual greatness. Few indeed are those whose minds can produce such a pure stream of thought to refresh the spirits of those who could never by themselves reach its sources.

A Zen student would find much that is appealing in this rather austere conception of the aesthetic as a screening device for philosophy, and in the image of intellection as a pure stream which can refresh the mind and heart. Yet he would have certain reservations about Santayana's approach to philosophy.

In considering philosophy as art, the emphasis and the standard rest upon the *form:* the statement. The basic reason so few thinkers qualify as philosophers is their failure to build their enterprise into a unity which encompasses an "understanding of life." But followers of Zen would mistrust the philosophic statement itself. The goal for Zen, the purpose of self-discipline, is the enlightenment experience itself, not the production of a system of thought, even though it may contain the unity of form found only in great art.

THE central focus of Zen falls not upon the statement but upon the person; not on the knowledge but on the student. The results of discipline should terminate in a release from discipline. The scholar who experiences such release might exclaim, in the style of the mondo:

"How wondrous, how miraculous this—
I read books and I write papers!"

What then is the principle that will support scholars in their work as they seek to integrate knowledge? This is the same thing as asking what is the principle that will induce poets to see things wholly and clearly. Of course the person who sees thus clearly understands that no such principle can be invoked. There is only the total life experience of the individual.

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THE TAO OF PAINTING

Mai-Mai Sze

道

The Attainment of Universality in Art and in Life

Ed. Note: The following is an extract taken from *The Tao of Painting*, by Mai-Mai Sze, Bollingen Series XLIX, through kind permission of the publishers, Pantheon Press. The two volume work is a study of the ritual disposition of Chinese painting, with a translation of the 17th century *Chieh Tzu Yuan Hua Chuan*, or Mustand Seed Garden Manual of Painting. These extracts are taken from pp. 33, 92-93, 94-96 of Volume I, and the cover reproduces Plate IV, following page 40.

PAINTING in China was never separate from the *tao* of living. Its main focus was, and still is, the *Tao*, the Way, the Order of Nature or the way nature works, which was alluded to not only in the classics but frequently in discussions of painting as the ideal —the harmony of Heaven and Earth that everything should express. In painting, this aim of the fusion of spirit, that which pertains to Heaven, and of matter, that which pertains to Earth, relates both to the artist's own development and to the work of art, for sucessful results require the exercise of insight as well as technical skill, the ability to render the inner character as well as its external form. . . .

The usual proportions of sky and earth in a Chinese landscape painting allow a conspicuous amount of space for sky, mist, and voids in relation to that given to mountains, trees, and other terrestrial features: an over-all statement of the dominance of sky (Heaven, *Yang*, spirit) over earth (Earth, *Yin*, matter). This concept is carried through and applied to every element of the composition. . . .

The application of the *Yin* and *Yang* extends to the placing of details and to interpretations in terms of human relationships. To give only one or two instances: in the painting of bamboos, an important consideration is the placing of some leaves "withdrawing" and "conceding" to others in front or pushing forward; in the drawing of the two parts forming the knot of a bamboo stem, the lower "supports" the upper; in painting two trees, a large one and a small, they are described as old and young, standing together but observing their proper ceremonial positions and attitudes, and a similar analogy is used for a large rock surrounded by child rocks. The relationship of prince and ministers and of host and guests are often applied, for instance, to the main peak among a group of mountains. Thus, ritual attitudes representing reciprocal and co-operative relationships aimed at general harmony are an important basic element of a picture. Such associations are numerous; but the vitality of the single natural forms and their places in a composition are never lost sight of, for the aim in painting them is *chen* (trueness) and *tzu jan* (naturalness). . . .

PERHAPS the most important factor in unifying and harmonizing all the elements of a picture is space. As that which contained everything in nature, the receptive, *yin* aspect of the *Tao* is emphasized. As space is filled with the *Ch'i*, the Spirit or Vital Force, it also has its *yang* aspect. It is this concept that makes the handling of space the most original contribution of Chinese painting and the most exhilarating aspect of the works themselves. While innumerable quotations could be cited from the Chinese literature of early periods, in particular the Taoist, to show how space was regarded as an equivalent of the *Tao*, it was mainly the influence of Zen Buddhism that led to the supreme statements about the *Tao* in the works of the Southern Sung painters, and in particular the landscapists. In the handling of vast space, their ink paintings are some of the greatest expressions of the human spirit. Where the Northern Sung painters excelled in height, in towering mountain peaks rich in detail, conveying an impression of the magnificence and multiplicity of nature, the Southern Sung painters merged the details in mists, obliterated them in space, and emphasized by depth of distances the silent majesty of nature and the mystery of the *Tao*. Both styles of painting lifted the spectator from the earth into liberating space. Both were virtually maps of the cosmos, for underlying philosophical ideas inspired these sublime views of nature. The great oceans on these maps were space, the perfect symbol of which was merely the blank silk or paper, and in many instances space was so represented in paintings. By the directness and purity of this device, the awareness of space was made more acute and its effects more profound. It should be

added, however, that the effectiveness of blank spaces was achieved only through contrast with the vitality of the brushwork that rendered the forms it surrounded. Brushwork devoid of expressive power fails to contribute meaning to space and spoils the painting as an integrated statement of the unity and harmony of nature. A striking example of the fluctuations of the *Yin* and *Yang* is presented in the contrast between the eternalness of space depicted by the "absence of brush and ink" and the temporal, passing quality of that which was drawn and painted: the permanence of space and the transience of the substantial. To vary the *Yin-Yang* interpretation still further, space as it was rendered in the best of Chinese painting might be described as a spiritual solid.

The ideas about pictorial space are taken from the sources of Chinese thought. In Chapter XII of the *Chuang Tzu,* for instance, it is stated: "At the Great Beginning there was Non-Being. . . ." This Non-Being was described as "emptiness (*hsü* and *k'ung*)." And "the *Tao* abides in emptiness." By analogy, "to a mind that is still the whole universe surrenders." An amplification was given in the following passage: "Maintain the unity of your will. Do not listen with ears, but with the mind. Do not listen with the mind, but with the spirit (*ch'i*). The function of the ear ends with the hearing; that of the mind with symbols or ideas. But the spirit is an emptiness ready to receive all things." A Zen Buddhist term, descriptive of movement and space, expresses this state of receptivity as *k'ai wu* (open-awareness), to apprehend in the deepest and widest sense. By "stilling his heart," that is, shedding the thoughts and emotions of his personal life, an individual could reflect in his heart-mind (*hsin*), or as a pool or a mirror, as the Taoists described it, the power (*Ch'i*) of the *Tao,* the harmony of Heaven and Earth. Hence the phrase "mirrorlike wisdom."

The stillness associated with emptiness of space and the *Tao* also is silence, which adds to the mystery of the *Tao* and stresses the reserve and meditative habits necessary for the painter to be receptive and able to express the *Tao.* Silence and emptiness of space possess vast powers of suggestion, stimulating the imagination and sharpening perception. And only through exercise of these highest faculties can the *Tao* be apprehended and expressed. . . .

In stilling the heart an individual can become one with the elements of nature, the great creative force of the *Tao.* This becoming one is the true meaning of wholeness. In painting, this goal is translated into the aim of the painter to identify himself with the object depicted, that is, to relate that in himself with that in all things which shared the Oneness of the *Tao.* "Becoming one with the universe" is the literal connotation of the character *ch'an* of Zen (ie, Ch'an): it is composed of *tan* (one, singleness) and *shih* (sun, moon, and stars hanging from Heaven, hence the universe), shown here in their old forms. The same *tan* character is used in the term *tan sê hua* (one-color painting) referring to ink monochrome and stressing the expression of one flash of comprehension of the *Tao,* the Sudden Enlightenment of Taoism and Buddhism. . . . And it may be deduced that "to clarify understanding and increase wisdom" means a contemplative attention to all things and to all of nature's changes in order gradually to gain a sense of the permanent and significant. . . . All the steps of the painter's arduous training, all his accumlation of all the means available, all his efforts in the long process of his development of the self, should be directed by the concept of the *Tao* and so be ritual acts sanctifying the painting that he produces. Then the tactility of brushwork is evidence less of the personal touch than of the power of the *Tao.* The anonymity of the ritual act is, in effect, oneness but with *Tao.* And painting is not self-expression but an expression of the harmony of the *Tao.*

On the Cover—

Bamboo in the Wind, done in ink on paper, is the work of Wu Chên (1280-1354), Yüan period. Wu Chên (*hao* Mei-hua Tao jên, Mei Tao-jên, and Mei-hua-an; *tzu* Chung-kuei) was a native of Chia-hsing district, in Chekiang. Traditionally one of the six Great Masters of the Yüan period, he is said to have followed in bamboo painting the Sung master, Wen T'ung. The inscription reads:

Bamboo, without mind, yet sends thoughts soaring
among the clouds.
Standing on the lone mountain, quiet, dignified, it
typifies the will of a gentleman.

Painted and written with a light heart by Mei Tao-jen

SOURCE READINGS: INTEGRATIVE MATERIALS AND METHODS

Through the Self into Being

THE Friends' annual conference on psychology and religion was held June 13-15 at Haverford College in Pennsylvania. Dr. Ira Progoff, psychologist, who teaches at the New School for Social Research, led the meetings. He used as text *The Cloud of Unknowing,* the work of an unknown fourteenth century monk which Dr. Progoff has put into modern English, with an introduction. The work contains a great deal that is significant in the spiritual dilemma of modern man.

Dr. Progoff stressed that the book speaks of a work for the individual to do in the development of his own inner spiritual resources. He suggested that this is the one source of strength today to withstand the psychological pressures of modern times. If released in society it might overcome the problems that are the heritage of a science misused. Dr. Progoff feels that this reaching for an inner source is not an isolated phenomenon with the Quakers, and does not depend on any particular religion or philosophy. Rather it is a wide movement which has the possibility of freeing us from the dangers in present-day society.

Modern man is in a place where he is not content with the old concepts, where his structure of symbols has broken down. He is neurotic largely because he no longer has faith in the symbols of religion. Because of this loss he is brought back to himself, his own being, as his main resource. This is deeply disturbing and painful, but it also may be just the situation needed for man to turn upon himself for growth and regeneration. Depth psychology corroborates the *Cloud's* view that man lives out of a level of experience several degrees removed from his conscious personality. This realization can lead the individual to search for the native, non-rational forces, and to begin to live the possibilities of his life at the fullest depths of himself.

The *Cloud* speaks of achieving the highest goal of union with God and with man. This implies much more than overcoming selfishness. There is a way of meeting others below the level of individual differences in the ground of man's "naked being," as the *Cloud* calls it. At this level it is possible for men to meet just as human beings, so that individual separateness no longer keeps men divided from one another. Dr. Progoff highly recommends that groups meet together to experiment with this kind of relation. Such a communication makes something deep in the self come alive as it stirs up the unconscious.

Finding one's "naked being" requires that a person break first through the ego, then through the self itself, including both the conscious and the unconscious. This does not imply obliterating conscious capacities, but rather stepping beyond the self and its desires—not annihilation of the ego, but getting in touch with its source in a deeper level of the unconscious. Withdrawal of the ego often takes place normally when the unconscious comes into play, but if we consciously turn to this process the life energies turn down and in, and we contact the unconscious forces which greatly increase the energies and resources available to the ego.

Depth psychology speaks of an archetype in man's unconscious which refers to God. This is a basic universal in man's nature which needs to be touched and awakened. To do this one must overcome attachment to all beliefs and symbols, tear himself from his inherited symbols, and find his way individually to his own naked being. Then a stirring of an intent for God arises spontaneously, opening up the images of the unconscious which provide the possibility of awareness of God.

The *Cloud* offers a spiritual technique and also contains psychological content to stir the unconscious, whether religious or not. Depth psychology speaks of images in each individual which contain the specific potential of that person to be lived out, as an acorn contains the potential of the oak. Edmund Sinnott's work has placed biological ground under this concept in depth psychology. A work like the *Cloud* suggests ways to activate these images. It stimulates the development of the unconscious so that its images come alive and provide energy.

The task of finding one's "naked being" and achieving union with God requires deep earnestness and an experimental attitude. Each individual must find the method that derives from his own nature and use it for exploration. One will reach awareness of his inner core and fall away from it again and again. But there will be times of entrance into another dimension of reality where the problem is seen from a fresh point of view, as in Jung's analogy of letting the storm rage in the valley while one gets up into the sunlight on the mountain side. Individual work of this kind has profound social consequences, and Dr. Progoff believes that the approach has the possibility of success in meeting the world problem. He believes that the cumulative efforts of many individuals might have unexpected results. Perhaps modern man is uniquely fitted for this task of experiencing the basic image of God, since he is in a position to overcome particular religious beliefs. Herein may lie the possibility of a further step in the religious history of the West.

—S. J. Nicholson

History's Limitations as a Science

POLEMIC, a journal of contemporary ideas, published by the Adelbert College Student Council and the Polemic Society of Western Reserve University, won the 1957 first place award for college magazines in PiDelta Epsilon competition, for it is a beautifully designed and executed little magazine. The Spring 1958 issue contains articles, fiction, poetry, a symposium on science and education, and several fine reproductions of etchings, woodblocks and aquatints.

One of the articles, "Science and the Historian," by Harvey Wish of the University's Department of History, deals with the controversial subject of the place of history among the sciences. Dr. Wish writes:

"History can easily record the accession of the Sputniks, but does it have any valid pretensions to being a science itself? College administrations never feel quite certain whether to classify history as a social science or as part of the arts or humanities. History's former companions among the social studies, psychology, political science, economics, sociology, anthropology, and their specialized offspring tend to be critical of the historian's scientific aspirations. . . .

"None of the social studies . . . can compete with the natural sciences in predictability, except in very limited areas of inquiry. History's hindsight can, in the mind of a bright practitioner, offer genuine foresight in the making of present public policies. In this respect history offers a unique service which is a full complement to the services of the other social studies. Our foreign policy staffs, our journalists, the business forecaster, the professional in a variety of fields, as well as the enlightened citizen, would all testify to the concrete value of an accurate analytical history.

"There is no great harm, even some benefit, in using the term social science for social study—as long as one does not confuse the term with a full-blown idea of natural sciences. . . . Social scientists, including historians, have made fruitful use of the idea of a scientific hypothesis, an educated guess, as to the proper methods or solutions sought. Therefore, a humble notion of the possibilities for absolute precision in the social studies does not rule out the usefulness of the term social science.

"However, most historians would insist upon the unique nature of their discipline, even if it cost them the coveted rank of social scientist. . . . The historian cannot emulate the natural scientist by experimenting with his many materials and draw upon inevitable inferences or conclusions. The best that he can do, as a first step, is to determine the authenticity of his materials by a series of critical checks, solve the linguistic and semantic problems if any, and utilize surviving contemporary non-literary sources such as art, architecture, coins, etc. But now his work as an historian, creatively constructing the present picture of the past, has just begun. This process requires a high degree of imaginative skill, but it cannot escape being partly subjective regardless of how hard the historian tries to free himself of bias and contemporary pressures. . . .

"The present generation of historians is not as confident as the last regarding the clarity of Leopold van Ranke's injunction to stick to the facts and to tell how 'it actually happened.' In the first place, what facts? The myriad of events that occur each day, the destruction of the records covering most of them, and the new perspectives afforded by present-day experience mean that each historian has a task of selection unlike that of most social scientists. . . . no historian can tell how anything 'actually' happened; he can hope only to present a reasonable representation. . . .

"Those impatient with such a modest goal and ambitious for the same kind of experience as the natural scientist can dazzle the layman—and sometimes even the professional historian—with the trappings of scientific inevitability. Oswald Spengler's *Decline of the West* certainly dazzled thousands of readers several decades ago, but his notion of historical cycles was pure invention, a formula forcibly superimposed on the facts that seemed plausible because the author cleverly selected his facts and invented his emphasis to make his case. Toynbee is a more recent and more believable formula-maker, but somehow his facts, in the judgment of mere specialists, are basically untrue.

"Of course, the historian must be alert for genuine uniformities in history that suggest—not 'laws'—but basic trends and sound continuities. He helps our society to see itself in the perspective of time, thus giving the individual a greater understanding of himself through a review of man's potentialities as revealed in his past. History is something comparable with, though not quite the same as, memory. The historian is under pressure to use every kind of contemporary documentation available to escape the garrulities and errors of autobiographies written many years after the fact. He is not satisfied with 'authorities,' but wishes to get a close to the event as a living mortal can.

"In all this, he is no less 'scientific' than the judges, lawyers, and juries whose decisions may send a man to his death. The courtroom, too, deals with history. The event belongs to the dead past. The summing-up argument before the jury requires some of the same process of creative imagination that the historian uses. . . . The historian falls back on an analogous, though not quite identical, process."

After reviewing the efforts of Henry Adams to use the methods of natural scientists in the study of history, Dr. Wish concludes:

"While the subject matter of history has been broadened to embrace the total of man's activities—including histories of the social sciences—Clio cannot escape her obvious limitations as a science."

—E. B. Sellon

NEWS AND NOTES

SOCIAL, political and economic powers in the United States are nowadays distributed, though unevenly, among three public agencies: the communication system, the government, and the financial system. Ballots influence only the government directly, and even that by slow, delayed action, usually under pressure of past events. The press, which should keep all great issues and principles forward, pursues the ephemeral event, the expedient. The ultimate workings of the financial fabric remain, in effect, obscure. Therefore the American citizen is ill-equipped to use his only political instrument with much effect except when a breakdown is impending or at hand.

The scene is further complicated by the institutionalizing of all we do, and the interlocking of those institutions into the social system. Think for a moment of the supposedly non-political societies, such as the American Medical Association, the American Bar Association, the National Education Association, the American Management Association, the American Association for the Advancement of Science, and hundreds of others. One cannot but wonder what braking effect they have on progress, along with their undeniably valuable clearing-house function. What effect will the essential conservatism of these vast groups have when the necessities of a peace-sustaining economy finally demand far-reaching changes?

What will the officers and directors of these groups have to say about the internal improvements called for in press, government and financial systems? To what extent do they represent their electorate-membership, and respond to the needs known best to the thoughtful and courageous doctor, lawyer, librarian, manufacturer, writer, teacher? For we shall not get the answers to our social problems from the conformist.

If these organizations were really sensitive to the public need, they could immediately encourage study of the ways in which the American community could re-create itself. For real democracy to survive, the family and the school will have to effect the adjustments in education and in social practices that are demanded. Proper research and public demand will provide the right teaching materials to improve the schools. But will parents and teachers make the *new* their business, especially since the new is bound to be controversial and thus abhorrent to many conservative organizations? Can a local American school district found a community enterprise determined on a really good education? And will the newspapers help as much as they should?

The true relationship of school to home involves many problems with far-reaching social and economic implications. For example, when the economic benefits of technology are more equably shared, there should be no real excuse for mothers of young children to work in offices and factories. They should be freed to work with their children's teachers with real effect. The home and the school should share in a continuing learning experience for the child—and the inanities and violence of the television entertainment which fills the recreation hours of so many children do not fit into such a scheme. It is obvious that many changes are essential to that strengthening of society which lurks under the word *discipline*.

Consideration of what discipline really means leads us to the original sense of the term disciple, which referred to the moral force natural to enlightenment, and the respect engendered in young and old alike for enlightenment itself and hence for the bearer or teacher thereof. One speaks of mathematics as a discipline, meaning that its reach and reasonableness and integrity command us. Obviously, if our teaching leads to confusion, compulsion, boredom, and mechanization, instead of eagerness, delight in learning, free discovery and creativity, we are not affording a discipline in the proper sense of that word.

We used to be told that the brutalities of the English public school system (in the days, say, of Thackeray's childhood) made for greatness. Nowadays no one would defend such outrages, and every effort is made to restrain the torments of bullies on the playground. But too much care goes to prevention. Constructive measures needed to establish discipline—in the sense of learning loved and pursued by the whole family—should be in the reach of all. The resources for such a program are at hand, but we do not have the orientation called for, especially in science and philosophy. The needs are admitted; the ways to fulfill them are far from clear.

One simple and useful step is to look at other systems which have related family to school in terms of mores and discipline. A sympathetic yet wholly objective account of a French community school will be found in *Village in the Vaucluse,* by Lawrence Wylie (Harvard University Press). Here there is strict discipline of the old familiar kind, which includes pinning upon a child's back the evidence of his failure to learn, and sending him home through the streets thus publicly punished. Necessarily such methods will not do for the American people, who must find their own way to something effective. But a reading of *Village in the Vaucluse* will help to dis-

play what a vividly intimate relationship can exist between school, home and community. We Americans have yet to create anything like such a community life, in which discipline will begin to have its old meaning and force. We have yet to establish the means for the community to grow in knowledge. Something has to be added to "life, liberty and the pursuit of happiness." The philosophy of the school and the home must, to form a true community of interest, be the same philosophy.

THE independence of the local school system can be a source of great advantage to those teachers and administrators who are seeking new ways to adjust to the demands of the times. At the community level it is possible to experiment and innovate. For example, there has been widespread individual response to the current visit of Dr. C. Gattegno, Secretary of the International Commission for the Study and Improvement of the Teaching of Mathematics. Dr. Gattegno's tour opened during September in the state capital of Washington, with his visit sponsored by city and county school officials. Similar visits to other parts of the state have been shared by observers from the Western Washington State College of Education and by the University of Washington with city and county sponsors. This program will be repeated in many other states throughout the country.

We have grown to expect such responsiveness to new and promising ideas on the part of schools and colleges. But is there an equal flexibility, interest, and readiness to work along new lines of all kinds displayed by the great organizations mentioned above?

As to the National Education Association and its approximately thirty-four departments and affiliates, the answer to this question will be fateful. For the schools cannot be expected to fill the national needs independently; they must be actively helped.

What positive assistance could the N.E.A. give to teachers and administrators? It could begin to work steadily with the major Foundations upon a genuine program of integrative research instead of "broad inter-disciplinary approaches." (If we continue forever to approach we are likely never to arrive!) What is now needed is a deep-reaching, not shallow-operational, inquiry, that will develop every medium which can help the student to *experience* ideas, insights and feelings about the true knowledge of nature and of man. The N.E.A. could also get to work upon American organs of communication, in all their varied aspects. Such items as the forthright report on Russian education which our admirable Federal Commissioner for Education lately issued, after a visit to the Soviet Union, deserve wide circulation and comment.

This country was born in times that tried men's souls. In the colleges there is now some doubt about the existence of souls. But no one doubts that we are entering on a period of truly sobering if not overpowering demands for change. Our social, political and economic agencies cannot be expected to evolve what is called for, since it is among them that the changes must come about. The schools and colleges must provide the insight and the strength of purpose needed. Other great organizations may or may not help us very much, but that pyramid of power styled the National Education Association is beholden to no one except the teachers and administrators who indeed *are* the N.E.A. If the Association can take up its appropriate part with the same independence that its members display, the American system can make the change ahead democratically, and emerge with freedom undiminished—in fact, enlarged. Practice, says the copybook maxim, makes perfect.

—*F. L. Kunz*

COLUMBIA University has launched a new quarterly journal of fact and opinion, *Forum*. The magazine is designed to cover as wide a range of idea and opinion as possible, from science to art, business to education. The Spring 1958 issue (Vol. I, No. 2) contains articles in the following variety: The Esthetics of Plenty, American Business' Stake in the Common Market, The Trouble with Science Education, American Architecture, Front End Arithmetic, Exchanging Scholars with the Soviet Union, The Art of Biography, Sculptors & Scabblers, Scientists & Satellites, and the Hysteria Over Getting Into College. Although the journal intends to provide a forum for the thoughts and opinions of people who are in some connected with Columbia, and has a brief section of news about the University, it will be (and has already been) widely welcomed by all who can enjoy and profit from a lively exchange of ideas on subjects that concern us all.

OUR attention has recently been drawn to the Institute for the Study of Mental Images, at Church Crookham, Hants, England. This organization was established in May 1956 to evaluate experimentally the status and behavior of mental images not immediately related to sensory stimuli (such as perception, long-term memory, inheritance, dreams, hallucinations and the phenomena of psychical research), and to pursue theoretical investigations in general psycho-physical theory. The work is under the direction of C. C. L. Gregory, a mathematical physicist who was for many years Director of the University of London Observatory and Head of the Department of Astronomy, and Anita Kohsen, a psychologist who is principally interested in psychopathology and animal ethology. Their attempts to formulate a quantitative psycho-physical cosmology are reported from time to time in their journal *Communications,* and a book is in preparation.

TRIGANT BURROW: A LIFE IN LETTERS

Ralph F. Hefferline

One Man's Lonely Search for the Realities in Human Nature

"DOES Burrow think he is going to cure the world!" These words Burrow attributed to Freud in a letter which he wrote, two years after Freud's death, in 1941. To his correspondent he added, "But after all, why not?" Far from believing, as Freud did, that repression is the price of civilization, Burrow's position, adopted rather abruptly in 1918 while an orthodox, practicing psychoanalyst, was that a social neurosis exists, which, sparing no one, is species wide. His therapeutic goal became, not cure of the individual by returning him to "normality"—for "normality" is merely the expression of the collective neurosis—but the return of Man to biological integrity.

A Search for Man's Sanity: The Selected Letters of Trigant Burrow with Biographical Notes (Oxford University Press, New York, 1958, 592 pages, bibliography and index, $8.75) was prepared by the Editorial Committee of the Lifwynn Foundation, an organization incorporated in 1927 "for Laboratory Research in Analytic and Social Psychiatry." Sir Herbert Read, poet, editor, and recipient of a number of the contained letters, contributed an appreciative foreword. All aspects of the work, from paper selection to proof-reading, have been handled with the elaborate care befitting a memorial volume.

The letters are offered in the poignant hope that through them Dr. Burrow will at last make himself widely understood. In contrast to the "impenetrable jargon" of his technical writing, his epistolary style is asserted to be a model of clarity, giving *The Selected Letters* the chance to "be the necessary intermediary between the public and the scientific works." That they will serve such a function this reviewer gravely doubts. However, what was important in Burrow's discoveries presumably will not be lost, for it seems now in process of rediscovery, independently of Burrow, by workers with far better technical equipment and with the advantage of living in a generation somewhat readier to assimilate such findings.

His group analytic work, antedating but not clearly related to the development of modern group psychotherapy, began in 1918 while psychoanalyzing Mr. Clarence Shields. This patient suggested that they reverse roles—that he play doctor and the doctor play patient. Instead of disposing of this outrageous proposal with the usual Oedipal interpretation, Burrow acceded, with the consequence that he and Mr. Shields analyzed each other more or less continuously for the next thirty years. The twosome expanded into a group of perhaps a dozen or more, with members apparently added or dropped from time to time, and "embracing such wide socio-economic extremes as a woman from the wealthiest and most aristocratic family in Maryland, and a street car conductor." All were equally "doctor" and "patient," with each trying to correct in himself and the others the "divisive" and "partitive" reactions of which "man as a phylum" has become victim.

The rationale of this proceeding is conveyed perhaps as well as anywhere in a letter which Burrow wrote in 1932 to one of his students, at a time when he was following closely Coghill's experimental analysis of the structure and behavior of amblystoma: "—you should study the life processes of the salamander! It seems there is quite a simple and unaffected action of the whole organism with these little creatures, but then parts of them—a forelimb, let us say—take on at times a quite independent, reflex action. These localized and independent departures in function assume betimes, I am told, a quite hoity-toity air. They even assume quite an 'antagonistic' manner of behavior toward the primary total action of the organism. I believe though that, in the salamander and kindred forms of life, these arbitrary and partial activities remain quite 'discrete,' as the biologists say. They do not assume any total or integrated or centred principle of individuality or identity. The total salamander preserves its individuality intact, as I understand it. There are these little side currents—these little eddyings of activity here and there—but 'Who cares?' says salamander. As long as they do not get organized, do not form a union, as it were, they cannot really threaten the vested capital, so to speak, of the central salamander principality.

"Man, too, began using these little physiological asides, these partial reactions, these reactions which are unintegrated with the 'total action-pattern.' That was long, long ago though, so long ago that you and I do not remember any more. But as I figure it out, these, at first, quite incidental and insignificant rebel activities began more and more to systematize themselves, to organize, to form trade unions, so to speak. They became specially strongly organized in the region of the cerebrum, and through it these 'partitive' stimuli and responses found a ready inter-connection or inter-change socially. Then gradually the centre of gravity was shifted, or rather the organism began to act *as though* the centre of gravity were shifted. The principle of identity or of individuality was artificially

displaced into this localized, cerebral zone of interchange among us. These partial activities systematized themselves into something called 'I', and this 'I' constituted the identity that replaced the identity of the organism as a whole. This truancy, this misappropriation of feeling, this displacement of the centre of gravity, or of personality, so to speak, has registered itself in the tissues of the human organism. It is faintly, very delicately perceptible now of course after all these—heaven knows how many—hundreds of thousands of years of our inadvertent self-ostracism. But it *is* perceptible. This partial, this cerebral innovation, this systematization of discrete functions is perceptible as being separate or discrete from the main trunk of man's feeling-life. It is probably some organic protest within the species against this arrogant shift of man's physiological centre of personality or authority that is the true account of the superficial symptoms we see today in man's social unrest, depression and outer disintegration generally." (pp. 252-3)

In 1933 Burrow was dropped from membership in the American Psychoanalytic Association, although a charter member and one of its former presidents. He regretted keenly this loss of official contact with men whom he regarded as his colleagues, and in his final published letter to Freud, written in 1935, he said, "I have at no time retreated from the position, held by me from the outset, that the investigations of my associates and myself have represented the consistent development of principles first established by you."

Burrow's morale was bolstered during this difficult professional period by the conviction that he was at last on the track of something tangible. He discriminated within his own organism a pattern of muscular tension which he took to be the physiological counterpart of the "social neurosis." Early in 1931 he wrote to his daughter:

"All observation hitherto has been dependent upon the external senses—anger, the feeling, isn't observable through the external senses—through the ordinary channels of perception. We've just seen that I only 'infer' the feeling of which I see the external signs. How do I infer it? Through the relation between such external signs and the sensation of anger as I have experienced it within myself, or subjectively. Very well, then it is within myself that I would best observe the sensation of anger. But observation as I have known it has been a projective act hitherto. My external sense—my eye—has observed only what is before it. Like the camera that doesn't take a picture of the photographer behind it, my eye does not see or photograph feelings or conditions lying back of it. Very well then, to see or observe my anger (it might as well be love, or suspicion or greed of course) my position of observation must move back to some point or zone where it will have the anger-feeling in front of it. And so, resting back, as it were, upon the organism's primary sensation as a whole—upon the zone of primary body-feeling, one senses at first very vaguely and fleetingly, certain sensations *in front of it,* that is, in the region within and around the eyes. And he comes upon this extraordinary observation—that all the emotions which he believed to be biological and organic do not occupy his organism as a whole, but are centred around the eyes (chiefly) and are perceptible as certain definite tensions and constraints within that zone! No matter what the emotion—whether pleasurable or distressing—it is now objectively perceived as a sensation of stress about or within the eyes. Now coincidentally with this shifting of the perceptual feeling-zone into the primary body-zone, there is a quiet, inclusive, self-possessed feeling or reaction. One gets a sense of having really never 'seen' (as he thought) anger or love or desire, he gets a sense of the utter artificiality of his relationship to others (and to himself) on the basis of this sort of 'seeing' or 'feeling.' He has been living—experiencing feeling—in front of his eyes, outside of himself, of his organism, where no living or feeling exists. It is really so simple but not without procuring another camera and setting it back where one may get a picture of the photographer—Mr. Man—who has hitherto been taking pictures of everyone else! You and I and the rest of us being Mr. Man." (pp. 237-8).

By 1937 Burrow and Dr. Hans Syz, Scientific Director of the Lifwynn Foundation, were concerned with the question of whether instrumentally measurable differences in physiological functioning could be established for two subjectively discriminable "modes of attention"—"ditention" (the habitual tension pattern taken to be characteristic of the socially neurotic condition) and "cotention" (the tensional pattern attainable with practice supposedly characterizing the biologically integrated condition of the human organism). Experimental findings began to be published in 1941, and a complete summary of this laboratory work was published as appendices in Burrow's last two books, *The Neurosis of Man* and *Science and Man's Behavior.*

Differences between ditention and cotention were apparently conclusively established with respect to electroencephalographic patterns, respiration, and frequency and kind of eye-movement. Significant cardiac changes were not found. Results from sixteen experimental subjects, eight men and eight women, showed, despite individual differences, a high degree of consistency.

So far as the reviewer knows, little, if any, theoretical use has been made of these findings since Burrow's death in 1950, and no one, it seems, has taken them as starting points for further experimentation. Regardless of whether these two tensional patterns mean what Burrow thought they meant, they do pose important unsettled questions. At the very least they indicate the possibility of self-instructed control over physiological activities conventionally classed as involuntary. Perhaps the matter will be clarified inci-

dentally in experimental programs now under way which are concerned with the role of "private stimuli" in the control of human behavior (e.g., 1).

The evidence is strong that Burrow performed a monumental and an heroic piece of work. His life was a model of what he conceived to be devotion to scientific and humanitarian ends. Yet it appears that he worked somewhat off to the side of the main stream of scientific traffic, and there is a fair possibility that he will continue to be by-passed and never serve as a key charge in detonating the scientific and social changes which he so ardently yearned for. That he was not sufficiently understood and appreciated in his own time is obvious. That he will not be later rests on the likelihood that what is lasting in his formulation will be independently stated by others on more comprehensive and compelling evidential grounds.

To temper the tragic aspects of his case, it may be inferred that he did enjoy major satisfactions from his efforts. Contrary to his own teachings, however, he indulged a proprietary gusto in his own theories, dissociated himself almost disdainfully from the not unrelated endeavors of such men as F. Mathias Alexander and Count Korzybski, and coldly discouraged the "unqualified" from taking an active interest in his work. Rightly or wrongly, he saw other men reaping his harvest, and, for instance, charged Harry Stack Sullivan with "helping hmself lavishly to my material."

To such personal criticisms as the above Burrow himself might reluctantly have agreed, and then responded with some variation of what he wrote in 1949, a year before his death, "It isn't true that human nature cannot change, that man must be always a fool. Man is only playing a part—an unconscious part. It is incumbent upon him—upon us—to change the false human nature that stage-struck man now everywhere takes to be true."

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REVIEWS

To Join the Rational and the Non-Rational

IN the years since Northrop published *The Meeting of East and West* (1946), no book has been issued more valuable than *The Tao of Science,* an Essay on Western Knowledge and Eastern Wisdom, by R. G. H. Siu (Mass. Inst. of Tech. Press and John Wiley, N. Y., 1958, 166 pp. source list, index, $4.25). It should prove uniquely useful for teachers and senior students, not so much for its chapter on The Essential Element in Education ("general education . . . frequently is superficial and windblown"), as because the author deals in lay terms with the methodology common to science, philosophy and metaphysics, working from knowing and the known toward feeling and intuition, and on to the Real. Thus he opens up the way to re-integration of the sciences and the humanities.

There is also his style, not so much urbane as happy, witty and dispassionate. He has space for apt illustrations and folk-vision from all manner of sources, especially the Chinese. In general, as to systematic matters he is in accord with Northrop as to East and West, with Sorokin as to cognition, with Einstein as to the significance of science, and so on. He is acute as to India in contrast with China, carefully speaking (page 81) of "the Taoist East," and crediting the Hindus with grasp of space-time and motion, though not actually naming their Kala, Dik and Akasha, and with ideas of causality, their satkaryavada, which (page 27) he discusses explicitly.

The theme is the joining of East and West, the unknown and the known, the lasting and the ephemeral, the real and the unreal, the rational and the nonrational, the ordered and the turbulent, contemplation and action, art and science. . . . In short, the goal is the restoration of integrity. Nor does this book fall into the tiresome and endless discourses of dull people who keep telling us what ought to be done, but seem to have no glimmering how to do it. Siu tends to take evolution seriously, especially evolution through science. He does not turn away from the possibility of general development of extra-sensory perception in mankind. He singles out Schweitzer as a man whose stature was increased by putting humanity before success. He knows scientists (page 143) whose "souls clamor in their native humility for a return to the complete man." There is a chapter on that needed new functionary, the philosopher executive. The book points.

But it does not proceed to the possible program. Siu anticipates the evolution of man; he must be well ac-

quainted with the life of Buddha and the Indian prescription for self-evolution; he is acute about the convergence of all the religious systems toward the same metaphysical reality; he knows the importance of science; but there it ends. There is no hint that to our author space-time is real; nor that the postulates of successful deductive science may be attributes of reality; nor that the structure of the crystal is nothing more nor less than unheard music; nor that the roots of man are in the real and Nirvana is a practical objective. He neglects his opportunity to point out that educational research in the philosophy of science is truly practical, provided the right group is enlisted to direct the study—our author himself one among them, perhaps.

Let me end by saying that we should all be grateful for *The Tao of Science*. It may even prompt this much-needed research. The time surely cannot be far off when we shall see the need for spending some time, effort and money on studies in the kind of science which leads directly to philosophy and metaphysics, to orientation toward the non-material real. The materials are available and can be made accessible, so that the *fons et origo* of the two streams, Western knowledge and Eastern wisdom, may be revealed, and students of all ages may perceive their common source in Nature.

Order and Integration Absent Still

FOR many decades a deplorable state of irresolution in respect to the nature of knowing, of knowledge and of education has obtained. Various parties have long contended for attention: rationalists, theologians, agnostics, physicalists, scientists, mechanists, and perhaps a hundred other varieties of emotional and intellectual forms of commitment. In the last fifty years or so the confusion has worsened. One wonders, despairingly, if the babbling voices of opinion will ever be supplanted by a general body of knowledge about what matters.

The volume under notice here illustrates the failure. *The Order and Integration of Knowledge* by Dr. William Oliver Martin is published by the University of Michigan Press (347 pages, $6.50, 1957, no index), the author being a Catholic by conviction writing upon a Fellowship provided by the Ford Fund for the Advancement of Education. The book is recommended to Catholic readers with the explicit approval of the Censor Librorum. Thus we have a complete embodiment of tolerance and open dealing by a very wealthy philanthropy, a state university, a chairman of a department of philosophy (Rhode Island University), and a Church. But what is the end product? The book defends the position that man and knowledge are metaphysical in origin, and makes reference to contemporary science, yet in sum seems mainly to clothe the basic Catholic philosophical position in a garment of words and arguments so flowing as to conceal what is most admirable in that position.

This is not the kind of thing that the American education system most needs, just now.

As to this volume, the odd thing is that it does not even convey those elements of the essential Catholic philosophical position (as we understand them) which are most valuable and important. To the impartial observer, this position would appear to rest upon a proposition about the nature of reality so like that of the Vedanta as to encourage inquiry into both. Nothing of this is disclosed by the present volume, needless to say.

This is a book for anyone who enjoys discursive style, a thump delivered upon Bertrand Russell here, and a guarded quotation from Northrop there, a long passage from St. Thomas, a repeated return to Aristotle, and that analysis of language and shaded meanings in which semanticists rejoice. But it is not a work which will do anything in particular to convey actual substance about order and integration of knowledge so desperately needed for societies of free men the world over.

Sense and Sensibility Conjoined

IT is a relief to turn from endless argument *about* experience, knowledge, and insight, to expressions of these things by one who is rich with them. *Symbolism*, Alfred North Whitehead's Barbour-Page Lectures at the University of Virginia, 1927, just reissued (by the Macmillan Company, 1958, $2.50) affords 88 pages of an effortless expression of deep sensitiveness and quiet insight into the subject of historical names, music, literature and the like as symbols. Every word is charged with the author's communion with reality, his generous gratitude for the insights of others, the calm of certitude that without intercessors one can be and know truth.

On page 48 he quotes from *The Winter's Tale*:

". . . daffodils,
That come before the swallow dares, and take
The winds of March with beauty; . . ."
(*The Winter's Tale*, IV, iv, 118-120.)

as the fusion of past and all time in the moment. It is truly a superb example of the vesture with which beauty can cloth truth to make it visible. How many readers of these lines notice that all but one of the vowel and consonant sounds in *daffodils* are repeated in "before the *s*wallow *d*ares"? The delicate dignity of the daffodil, rooted in the quiet, fecund earth, is thus musically coalesced with the swoop of the free-darting swallow imminent in the spring's sweet air.

How different all this from the "wordy suspirations of expired breath" of the semanticists picking over the puzzle of the word as some jackdaw busy with snarled snippets of dusty old yarn. It is time some group began to work where Whitehead left off. We could use such a study of the mathematics of nature as would show that in instances such as this, the Poet's case, we are not so much dealing with *artificial* symbols as with the code of living truth, the truth in stones, in verdant landscapes, in flowers, buds, trees, lights and shadows, rainbows and the ice-sheeted Himalayas. There is a place where reason and feeling have a common origin. It is there Whitehead takes his start; and that is the reason why to him there is no fateful choice between, say, Hume and Kant (see p. 50). To him their thought merely was an occasion to go to the root of the matter where feelings and mind meet. The symbol sensed or said well is to Whitehead the reflection of that root. Sensibility is but sense.

It is good to have this rare little book back in print.

—*F. L. Kunz*